ABSTRACT OF THE DISCLOSURE

The invention provides a high-speed and easy motion information recognition system that is capable of recognizing the motion information directly from the images.

The system comprises an imager for taking time-series images of an object in motion, image capture means for capturing said time-series images of said object to generate image vectors, a primary component analyzer for obtaining a plurality of eigenvectors, through principal component analysis, of the image vectors of a sample object which are generated by said image capture means, a storage for storing said plurality of eigenvectors, inner product calculation means for performing inner product operations between the image vectors of a recognized object which are generated by said image capture means and said plurality of eigenvectors stored in said storage means and calculation means for obtaining the motion information of said recognized object based on the result of said inner product operations.

Because the motion information of an object is obtained directly from the related eigenvectors, the invention can provide a high-speed and easy motion information recognition system in which the computing cost can be reduced.